Statistical Bulletin
METROPOLITAN LIFE INSURANCE COMPANY
Volume 37 July 1956

## Age Trends in Poliomyelitis

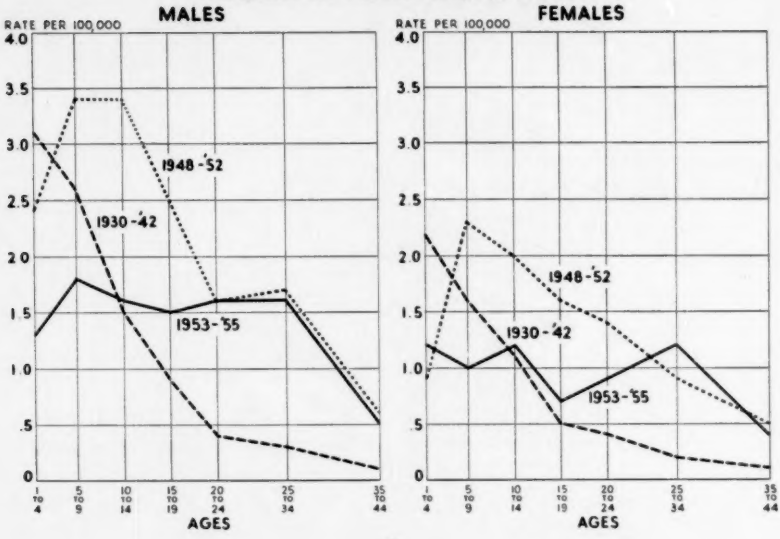
THE outlook in poliomyelitis, both immediate and long range, appears favorable. Up to the middle of July 1956, the number of reported cases in the United States was 28 percent lower than that in the comparable period of last year. The total number of cases for the current year cannot be estimated with any certainty at this time, however, because the incidence of the disease is usually concentrated largely in midsummer and early fall. Yet, it is noteworthy that in only two States in the South and the Southwest, where the seasonal rise normally occurs earlier than in the North, is the number of cases above that a year ago—and even there the increases are moderate. Elsewhere in the country, California and Illinois are the only States to have experienced a serious rise thus far in 1956; in Illinois the increase has been due to the outbreak in Chicago.

The annual total of poliomyelitis cases in our country has decreased since the peak year 1952. Compared with 57,879 cases reported during that year, there were only 29,270 in 1955. The case rate in 1955—the number of cases per 100,000 population—was the lowest since 1947.

An outstanding feature of the poliomyelitis trend is the change in the age pattern of the disease. Older children and young adults have been constituting an increasing proportion of reported cases and deaths. The situation with respect to mortality is illustrated in the chart on page 2, which shows the experience among the Industrial policyholders of the Metropolitan Life Insurance Company for successive periods since 1930. Among white males, the death rates in 1953-55 were lower than those in 1930-42 through ages 5-9, but were the higher thereafter, the margin increasing with age. Compared with 1948-52, the death rates in 1953-55 were lower through ages 15-19, but for subsequent ages the rates for the two periods were about the same. With minor exceptions, the trend among females paralleled that for males.

As a result of these changes, the

**DEATH RATES PER 100,000 FROM ACUTE POLIOMYELITIS**
White Persons by Sex and Age. Industrial Policyholders
Metropolitan Life Insurance Company, 1930-55




age contour of the mortality from poliomyelitis has been modified appreciably. In 1953-55, the death rates from the disease among white males varied but little until age 35, and then dropped sharply. For the preceding 5-year period, the rates rose to a peak at the elementary school ages, and then generally decreased with advance in age. In 1930-42, the death rates from the disease showed a continuous decline with age, beginning with early childhood. White females experienced a similar shift in age pattern, but the poliomyelitis death rates among them have been consistently lower than among males at every age group.

The age changes in the distribution of poliomyelitis cases are in line with those for deaths. The morbidity trends are best seen in the data on paralytic poliomyelitis, because in a considerable number of cases reported as nonparalytic the diagnosis of poliomyelitis is open to question. Long-term data on paralytic cases by age are available for only a few areas, but these show fairly consistent trends. Thus, in California, where the general incidence of the disease has been high since 1948, the rate of paralytic poliomyelitis between 1936-39 and 1952-53 increased more than threefold under age 25 but rose sixfold at ages 25-44. An increasing proportion of the paralytic cases in California has

been occurring at ages 25 and over, the figure reaching 22 percent in 1952-53. Trends similar to those for California are found in Massachusetts, Minnesota, and the city of Baltimore.

The shift in the age pattern of poliomyelitis may be the result primarily of a rise in the age at which natural immunity is acquired, the latter possibly reflecting the lessened frequency of exposure among children. That the use of the Salk vaccine provides some immunity to paralytic poliomyelitis is indicated by the fact that in 1955 a sharp drop occurred in the frequency of hospital admissions of such cases at ages 7 and 8—the ages at which the immunization program was largely concentrated last year. Furthermore, in upstate New York last year the rate for paralytic poliomyelitis at ages 6-10 was 21 per 100,000 among the unvaccinated and only 4 per 100,000 among the vaccinated. This study showed, in addition, that the rate was lower among those receiving two doses of the vaccine than among those receiving only a single dose. Similarly, in Massachusetts, which experienced a severe epidemic in 1955, the rate for paralytic poliomyelitis was 157 per 100,000 among unvaccinated children, compared with 63 among children receiving one dose of vaccine and with an even lower rate among those receiving more than one dose.

Various studies indicate that pregnant women are particularly vulnerable to poliomyelitis. Thus, in an outbreak in Minnesota in 1952,* the age-adjusted attack rate among pregnant women who were in contact with poliomyelitis cases was four times the rate among nonpregnant women in the childbearing ages similarly exposed. A study in New York City in 1949-53† showed that the estimated incidence of paralytic poliomyelitis in pregnant women was about twice that in the nonpregnant. It was further observed that the rate was higher in women who had previously had only one live-born child than in those who had borne none or more than one, and was highest in the last trimester of pregnancy.

The recent decline in the incidence of poliomyelitis is distinctly encouraging, but the optimism should be tempered. A prominent characteristic of the disease is its tendency to vary widely in incidence from year to year. As recently as 1947, the annual number of cases in the United States was only about 10,000. Moreover, while the results of the Salk vaccine hold out great promise, it will be some years before its long-term effectiveness can be established definitely.

*Paffenbarger, R. S., Jr., and Wilson, V. O., "Previous Tonsillectomy and Current Pregnancy as They Affect Risk of Poliomyelitis Attack," *Annals of the New York Academy of Sciences*, September 27, 1955, page 856.

†Siegel, M., and Greenberg, M., "Incidence of Poliomyelitis in Pregnancy," *The New England Journal of Medicine*, November 17, 1955, page 841.

# Catastrophic Accidents: A 15-Year Survey

DURING the 15-year period 1941-55, catastrophic accidents* took about 20,000 lives in the United States. The death toll fluctuated from year to year, ranging from a low of about 825 in 1941 to nearly 2,000 in 1947. In the first half of 1956, approximately 700 people were killed in catastrophes —an average figure, despite the loss of 128 lives on June 30 when two scheduled passenger planes presumably collided over Arizona's Grand Canyon in the worst commercial air transportation accident on record.

Ten disasters in the 15 years under review exacted a higher toll than this recent plane accident. As Table 1 shows, the outstanding catastrophe in this period was the Texas City fire in 1947, which caused 561 deaths. Next in rank were the night club fire in Boston in 1942, with 492 victims, and the explosion of two ammunition ships in Port Chicago, Calif., less than two years later, which killed 322

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**TABLE 1—ACCIDENTS RESULTING IN 100 OR MORE DEATHS**
In Order of Death Toll. United States, 1941-55

| Date | Place | Type of Accident | Number of Deaths |
|---|---|---|---|
| April 16-17, 1947 | Texas City, Texas | Fire and explosion | 561 |
| November 28, 1942 | Boston, Mass. | Night club fire | 492 |
| July 18, 1944 | Port Chicago, Calif. | Explosion of two ammunition ships | 322 |
| March 21-22, 1952 | Mississippi Valley States | Series of tornadoes | 229 |
| August 17-19, 1955 | Northeastern United States | Hurricane and floods | 180 |
| July 6, 1944 | Hartford, Conn. | Circus fire | 168 |
| April 9, 1947 | Texas, Oklahoma | Tornado | 167 |
| June 23, 1944 | Pennsylvania, West Virginia, Maryland | Tornado | 159 |
| June 8, 1953 | Michigan, Ohio | Series of tornadoes | 142 |
| October 20, 1944 | Cleveland, Ohio | Gas tank explosion | 130 |
| April 12, 1945 | Oklahoma, Missouri, Arkansas | Tornado | 119 |
| December 7, 1946 | Atlanta, Ga. | Hotel fire | 119 |
| December 21, 1951 | West Frankfort, Ill. | Coal mine explosion | 119 |
| May 25, 1955 | Kansas, Oklahoma, Texas, Missouri | Series of tornadoes | 115 |
| May 11, 1953 | Waco, Texas | Tornado | 114 |
| March 17, 1942 | Southern and Midwestern States | Tornadoes | 111 |
| March 25, 1947 | Centralia, Ill. | Coal mine explosion | 111 |
| January 3, 1944 | New York Bay, N. Y. | Destroyer explosion | 100 |
| November 25, 1950 | Northeastern United States | Wind and snowstorm | 100 |
| October 15, 1954 | Atlantic Coast and New England States | Hurricane | 100 |

Note: Figures for natural disasters are approximate.

*The term "catastrophe" as used here denotes an accident in which five or more persons were killed. Military aviation catastrophes are not included in this study.

**TABLE 2—NUMBER OF CATASTROPHIC ACCIDENTS* AND NUMBER OF DEATHS**
By Type of Accident. United States, 1941-55

| Type of Accident | 1941-55 | | 1941-45 | | 1946-50 | | 1951-55 | |
|---|---|---|---|---|---|---|---|---|
| | Accidents | Deaths | Accidents | Deaths | Accidents | Deaths | Accidents | Deaths |
| All Types† | 1,728 | 19,982 | 482 | 6,801 | 568 | 6,412 | 678 | 6,769 |
| Motor vehicle | 581 | 3,717 | 128 | 916 | 164 | 1,069 | 289 | 1,732 |
| Bus | 76 | 675 | 36 | 347 | 23 | 192 | 17 | 136 |
| Collision with railroad train | 15 | 161 | 9 | 97 | 3 | 42 | 3 | 22 |
| Other | 61 | 514 | 27 | 250 | 20 | 150 | 14 | 114 |
| All other motor vehicles | 505 | 3,042 | 92 | 569 | 141 | 877 | 272 | 1,596 |
| Collision with railroad train | 120 | 726 | 34 | 216 | 35 | 215 | 51 | 295 |
| Other | 385 | 2,316 | 58 | 353 | 106 | 662 | 221 | 1,301 |
| Conflagrations | 479 | 5,124 | 117 | 1,748 | 178 | 2,072 | 184 | 1,304 |
| Dwellings, apartments | 301 | 1,856 | 53 | 326 | 113 | 708 | 135 | 822 |
| Hotels, boarding houses, rooming houses | 51 | 634 | 18 | 213 | 18 | 302 | 15 | 119 |
| Homes for aged, convalescent, hospitals, etc. | 26 | 410 | 8 | 99 | 8 | 182 | 10 | 129 |
| Places of amusement | 5 | 679 | 5 | 679 | — | — | — | — |
| Other | 96 | 1,545 | 33 | 431 | 39 | 880 | 24 | 234 |
| Explosives and fireworks | 41 | 759 | 29 | 643 | 6 | 66 | 6 | 50 |
| Air transportation | 147 | 2,414 | 27 | 380 | 61 | 991 | 59 | 1,043 |
| Water transportation | 135 | 1,395 | 45 | 594 | 44 | 380 | 46 | 421 |
| Railroad‡ | 57 | 1,054 | 28 | 548 | 17 | 313 | 12 | 193 |
| Mines and quarries | 65 | 1,077 | 37 | 607 | 16 | 263 | 12 | 207 |
| Tornadoes, floods, hurricanes, etc | 159 | 3,941 | 50 | 1,163 | 61 | 1,129 | 48 | 1,649 |
| All other | 64 | 501 | 21 | 202 | 21 | 129 | 22 | 170 |

*The term "catastrophe" as used here denotes an accident in which five or more persons were killed. This table was compiled from insurance records, newspaper accounts, and other sources. The figures may not be quite complete, particularly with regard to accidents taking five to 10 lives.
†Does not include military aviation accidents.
‡Railroad train collisions with motor vehicles are included among motor vehicle accidents.

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people. Natural disasters of various kinds were responsible for five of the next six catastrophes listed in order of magnitude. Altogether, the period 1941-55 witnessed 20 disasters, each of which accounted for at least 100 deaths, the loss of life totaling nearly 3,700. Although these 20 disasters constituted little more than 1 percent of the 1,728 catastrophic accidents which occurred during the period, they accounted for nearly one fifth of all the catastrophe victims.

The extent to which the various types of catastrophes contributed to the total is shown in Table 2. Conflagrations accounted for 5,124

deaths, or for fully one quarter of the total loss of life in catastrophes in the 15-year period. Natural catastrophes—tornadoes, hurricanes, floods—caused nearly 4,000 deaths, and motor vehicles an additional 3,700. All other types of catastrophes together were responsible for little more than a third of the total.

Table 2 shows also the changes in the number of catastrophic accidents and deaths from one 5-year period to another. Catastrophes involving motor vehicles increased both in frequency and in lives lost. The number of such accidents rose from 128 to 289 between 1941-45 and 1951-55, and the deaths from 916 to 1,732. At the same time, such deaths increased from 13 to 26 percent of the total, and rose in rank from third to first. The level of motor vehicle fatalities was relatively low during the World War II years, when driving was sharply curtailed, but the fact is that the increase in deaths was considerably greater between 1946-50 and 1951-55 than between the war and immediate postwar years. An encouraging aspect of the motor vehicle accident problem is the decreasing loss of life in catastrophes involving buses.

Both natural disasters and civil aviation catastrophes took considerably more lives in 1951-55 than in 1941-45. The victims of tornadoes, floods, hurricanes and other natural catastrophes increased from 1,163 to 1,649; although deaths in civil aviation catastrophes rose from 380 to 1,043, the increase is by no means proportionate to the tremendous growth in air travel.*

The record for catastrophic accidents on railroads and in mines and quarries has improved markedly. For example, the number of railroad catastrophes decreased from 28 to 12 between 1941-45 and 1951-55; the death toll dropped correspondingly from 548 to 193. The loss of life in conflagrations likewise was lower in 1951-55 than in the preceding periods, although fires in dwellings have been taking an increasing number of victims.

*For a discussion of the sharp decrease in the aviation death rate on the basis of passenger miles flown in scheduled air transportation, see *Statistical Bulletin*, May 1956, pages 5-7.

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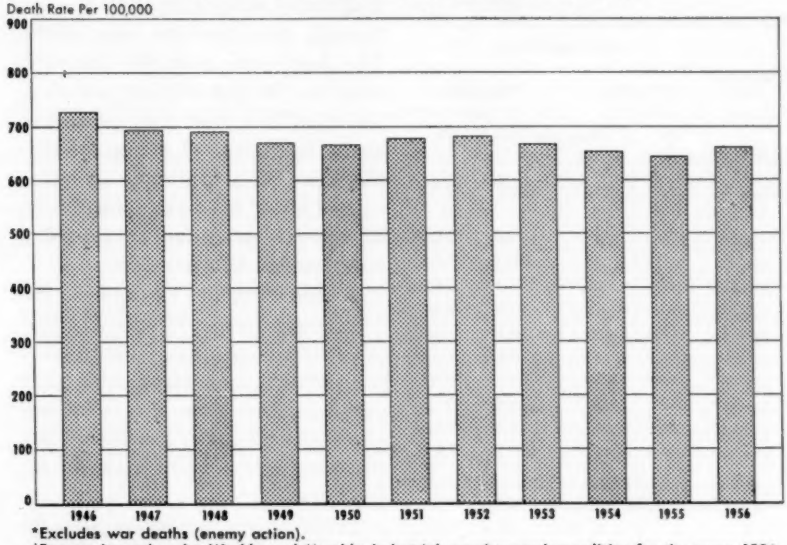
## Moderate Increase in Mortality This Year

FOR the first six months of 1956, the death rate among the Industrial policyholders of the Metropolitan Life Insurance Company exceeded by 3 percent the rate for the corresponding period of 1955 and by 1 percent that recorded two years ago. Mortality conditions

**DEATH RATES PER 100,000 FROM ALL CAUSES***
Total Persons, All Ages. Industrial Policyholders†
Metropolitan Life Insurance Company. First Six Months, 1946-56




*Excludes war deaths (enemy action).

†Persons insured under Weekly and Monthly Industrial premium-paying policies for the years 1954-56; 1955 includes in addition persons with Ordinary Monthly Premium Policies for Less Than $1,000, and beginning with March 1956, persons with Debit Book Ordinary policies for $2,000 or less.

nevertheless continue to be very favorable, the current death rate of 661.8 per 100,000 being below that for the first half of any year prior to 1954. (See accompanying chart.)

Both white male and female policyholders recorded slight increases in mortality since last year, as may be seen in the table on page 8. Among males, the changes in death rate by age showed no definite pattern. Among females, however, there were increases between 1955 and 1956 at the ages under 10 and decreases in the succeeding age groups.

The rise in the over-all death rate this year reflects mainly the increase in mortality from the major chronic diseases. For the cardiovascular-renal diseases, the mortality rate for the first half of 1956—354.5 per 100,000—was nearly 3 percent above the comparable rate for last year, namely, 344.9 per 100,000. Somewhat sharper was the rise in mortality from arteriosclerotic and degenerative heart disease, the largest component of the cardiovascular-renal group. The death rate from the malignant neoplasms (cancer and allied conditions) increased about 3 percent, from 129.4 per 100,000 in the first six months of 1955 to 132.9 in the like period

**MORTALITY FROM ALL CAUSES***
First Six Months of 1956 and 1955
White Industrial Policyholders
Metropolitan Life Insurance Company

| Age Period (Years) | Death Rate per 100,000 | | | |
|---|---|---|---|---|
| | White Males | | White Females | |
| | 1956 | 1955 | 1956 | 1955 |
| Under75 | 695.1 | 693.9 | 499.7 | 497.2 |
| Under 5 | 189.2 | 194.3 | 144.5 | 131.0 |
| 5– 9 | 42.6 | 47.7 | 38.5 | 34.3 |
| 10–14 | 44.6 | 40.1 | 27.4 | 28.7 |
| 15–19 | 92.6 | 92.2 | 44.2 | 45.6 |
| 20–24 | 137.3 | 127.1 | 48.5 | 53.5 |
| 25–34 | 143.7 | 145.0 | 76.7 | 80.5 |
| 35–44 | 376.8 | 353.0 | 181.0 | 195.5 |
| 45–54 | 1,017.1 | 1,059.0 | 476.4 | 495.8 |
| 55–64 | 2,506.9 | 2,451.5 | 1,224.1 | 1,228.6 |
| 65–74 | 5,506.6 | 5,615.2 | 3,456.5 | 3,473.7 |

*Excludes war deaths (enemy action).

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of the current year. For cancer of the respiratory system, the increase was about 7 percent. The death rate from diabetes, another important disease of middle and later life, was up fractionally. The pertinent figures are given in the table on page 11.

Although there were no widespread outbreaks of respiratory disease in the early part of the year, the mortality from pneumonia and influenza was higher in the first half of this year than last, the rates being 18.6 and 16.8 per 100,000, respectively. On the other hand, tuberculosis continued its long-term downward trend, even though the decrease was slight. The death rate from the disease is down to 8.0 per 100,000, which is less than half that four years earlier. The principal communicable diseases of childhood—measles, scarlet fever, whooping cough, and diphtheria—continue to record a very low mortality.

In this insurance experience, the death rate from poliomyelitis for the first six months of 1956 was .1 per 100,000, compared with .2 a year ago. The recent mortality and morbidity trends of the disease are discussed in the first article of this BULLETIN.

The accident toll among the Industrial policyholders was about 8 percent higher in the first half of this year than last, the death rate rising to 36.2 per 100,000, the highest since 1952. For motor vehicle accidents the increase between 1955 and 1956 was proportionately greater—from 13.8 to 15.3 per 100,000. The suicide rate, however, decreased somewhat to 5.9 per 100,000, or to practically the record low of two years ago. Homicide continued at the minimum established in the corresponding period of last year.

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## Composition of the American Family

MORE than 90 percent of the American people live in families, that is, together with persons related by blood, marriage, or adoption. In April 1955 there were nearly 42 million families in our

country, a gain of 9¾ million since 1940 and of more than 2½ million since 1950. There are several reasons for expecting that the number of families will continue to grow. The marriage rate is expected to

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**CHARACTERISTICS OF FAMILIES IN THE UNITED STATES, APRIL 1955**

| Characteristic | Age of Family Head, in Years | | | | | | |
|---|---|---|---|---|---|---|---|
| | 14 and Over | 14-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65 and Over |
| Families—number in thousands | 41,934 | 2,023 | 8,929 | 10,388 | 8,632 | 6,560 | 5,402 |
| —percent distribution | 100.0 | 4.8 | 21.3 | 24.8 | 20.6 | 15.6 | 12.9 |
| Composition—percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Husband-wife families | 86.8 | 90.6 | 91.6 | 89.1 | 87.1 | 83.9 | 75.9 |
| No other family member | 26.3 | 35.7 | 12.9 | 12.2 | 25.1 | 44.3 | 51.9 |
| Own children under age 18 only | 40.6 | 49.7 | 71.5 | 61.3 | 30.3 | 8.3 | 2.0 |
| Other | 19.9 | 5.2 | 7.2 | 15.6 | 31.7 | 31.3 | 22.0 |
| Other families with male head | 3.1 | 1.7 | 1.6 | 2.3 | 3.0 | 3.9 | 7.0 |
| Families with female head | 10.1 | 7.7 | 6.8 | 8.6 | 9.9 | 12.2 | 17.1 |
| Average size*—total | 3.60 | 3.08 | 4.00 | 4.18 | 3.65 | 3.00 | 2.66 |
| Husband-wife families | 3.66 | 3.08 | 4.04 | 4.26 | 3.71 | 2.98 | 2.63 |
| Wife 14-34 years old | 3.97 | 3.08 | 4.04 | 4.25 | 4.20 | 4.40 | 4.50 |
| Wife 35-54 years old | 3.85 | 3.04 | 3.88 | 4.27 | 3.72 | 3.29 | 3.24 |
| Wife 55 years or older | 2.64 | — | — | 2.75 | 2.95 | 2.71 | 2.56 |
| Other families with male head | 2.94 | 1.86 | 2.91 | 3.00 | 3.15 | 3.08 | 2.76 |
| Families with female head | 3.26 | 3.27 | 3.74 | 3.62 | 3.25 | 3.11 | 2.76 |
| Related children under age 18 per husband-wife family—total | 1.33 | .95 | 1.89 | 2.06 | 1.20 | .45 | .18 |
| Wife 14-24 years old | 1.20 | .90 | 1.47 | 1.18 | 1.00 | — | — |
| Wife 25-34 years old | 2.08 | 1.39 | 2.03 | 2.20 | 2.06 | 1.95 | — |
| Wife 35-44 years old | 1.91 | 1.00 | 1.77 | 2.07 | 1.68 | 1.47 | 1.32 |
| Wife 45-54 years old | .77 | — | — | .96 | .86 | .58 | .63 |
| Wife 55 years or older | .17 | — | — | — | .33 | .22 | .12 |
| Age of members, excluding family head—percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 6 years | 20.0 | 43.7 | 40.6 | 18.7 | 7.7 | 6.0 | 3.3 |
| 6-13 years | 22.0 | 3.2 | 21.6 | 34.1 | 21.8 | 9.8 | 6.3 |
| 14-17 years | 8.2 | 4.6 | 1.3 | 11.2 | 14.5 | 8.1 | 3.8 |
| 18-24 years | 9.7 | 41.4 | 7.9 | 4.0 | 13.7 | 13.3 | 5.4 |
| 25-44 years | 22.5 | 5.7 | 26.4 | 27.4 | 17.5 | 17.1 | 21.3 |
| 45-64 years | 12.9 | .9 | 1.4 | 2.5 | 21.3 | 40.7 | 29.2 |
| 65 years and over | 4.7 | .5 | .8 | 2.1 | 3.5 | 5.0 | 30.7 |

*Average number of family members per family.

Note: This table is derived largely from data published by the Bureau of the Census in *Current Population Reports* Series P-20, No. 67.

swing upward in the near future, as the record crop of "war babies" reach marriageable age. Then, too, some couples now living "doubled-up" will undoubtedly set up homes of their own and will then be counted as separate families. Furthermore, continued favorable mortality conditions will keep many families from being broken prematurely by death.

In about 11 million families, or in fully one fourth of the total in our country, the family head is under 35 years of age. Of the 20½ million families in which the head is 45 or older, almost 5½ million have heads who are at least 65 years old. The details are given in the table on page 9.

Married couples account for seven out of every eight families in the United States, but the proportion varies with the age of the family head. Husband-wife families comprise nine tenths of all families in which the family head is under 45 years of age. The proportion decreases in later life as death takes an increasing toll of husbands and wives, but such families constitute no less than three fourths of the total even where the head is 65 or older. Moreover, in many families broken by death, the surviving spouse keeps the remaining family members together.

About two thirds of husband-wife families have their own children or other relatives living with them. The proportion is even higher—six out of every seven—in families where the husband is aged 25-44 years. During this period of life, families reach their maximum size. In 1955 they averaged 4.04 members per family where the husband was 25-34 years and 4.26 members per family where he was 35-44 years.

Family responsibility for dependent children is high during most of the husband's working lifetime. Thus, when he is 25-34 years of age, there are 1.89 children under age 18 per family. This rises to a peak of 2.06 for husbands 35-44 years of age, but decreases to 1.20 in the next age group, 45-54 years, largely because children reach maturity.

Children are a large part of the membership of young families, as shown in the lowest tier of the table. For example, where the head is aged 25-44 years, children under age 18 constitute nearly two thirds of the family members, other than the head. The proportion is still more than two fifths in families where the head is 45-54 years of age. However, in families where the head is age 65 or older, less than one seventh of the other family members are under 18 years of age. Nevertheless, family heads aged 65 and over have 1.2 million children under 18 years old living with them.

## MORTALITY FROM SELECTED CAUSES

Industrial Policyholders, Metropolitan Life Insurance Company
June 1956

| Cause of Death | Annual Rate per 100,000 Policyholders* | | | | |
|---|---|---|---|---|---|
| | June | | Year to Date | | |
| | 1956 | 1955 | 1956 | 1955 | 1954 |
| All Causes† | 621.5 | 615.7 | 661.8 | 644.4 | 652.1 |
| Tuberculosis (all forms) | 7.9 | 7.6 | 8.0 | 8.2 | 9.7 |
| Communicable diseases of childhood | .1 | .1 | .4 | .3 | .4 |
| Acute poliomyelitis | — | .2 | .1 | .2 | .2 |
| Malignant neoplasms | 135.8 | 126.0 | 132.9 | 129.4 | 129.8 |
| Digestive system | 47.2 | 44.1 | 45.5 | 45.1 | 47.4 |
| Respiratory system | 18.4 | 16.4 | 17.9 | 16.7 | 16.5 |
| Diabetes mellitus | 13.5 | 13.8 | 16.2 | 15.6 | 15.4 |
| Diseases of the cardiovascular-renal system | 318.2 | 328.4 | 354.5 | 344.9 | 347.1 |
| Vascular lesions, central nervous system | 63.1 | 65.0 | 69.6 | 66.9 | 66.6 |
| Diseases of heart | 230.8 | 238.2 | 259.0 | 251.7 | 252.6 |
| Chronic rheumatic heart disease | 10.5 | 10.5 | 12.3 | 13.0 | 13.2 |
| Arteriosclerotic and degenerative heart disease | 177.6 | 186.5 | 201.3 | 193.8 | 189.5 |
| Diseases of coronary arteries | 104.6 | 108.6 | 115.1 | 111.9 | 111.2 |
| Hypertension with heart disease | 34.9 | 32.6 | 36.9 | 36.3 | 40.4 |
| Other diseases of heart | 7.8 | 8.6 | 8.5 | 8.6 | 9.5 |
| Nephritis and nephrosis | 8.5 | 8.9 | 8.3 | 9.3 | 10.1 |
| Pneumonia and influenza | 14.7 | 10.7 | 18.6 | 16.8 | 16.4 |
| Complications of pregnancy, childbirth | 1.0 | 1.3 | 1.0 | .9 | 1.0 |
| Suicide | 7.0 | 7.3 | 5.9 | 6.4 | 5.7 |
| Homicide | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 |
| Accidents—total | 38.3 | 35.5 | 36.2 | 33.6 | 35.4 |
| Motor vehicle | 15.6 | 14.9 | 15.3 | 13.8 | 14.1 |
| All other causes | 82.8 | 82.5 | 85.8 | 85.9 | 88.7 |

*Persons insured under Industrial premium-paying policies for 1954; beginning with 1955 there are included in addition persons with Ordinary Monthly Premium Policies for Less Than $1,000, and beginning with March 1956 persons with Debit Book Ordinary policies for $2,000 or less.

†Excludes war deaths (enemy action).

Note: The rates for 1955 and 1956 are provisional.

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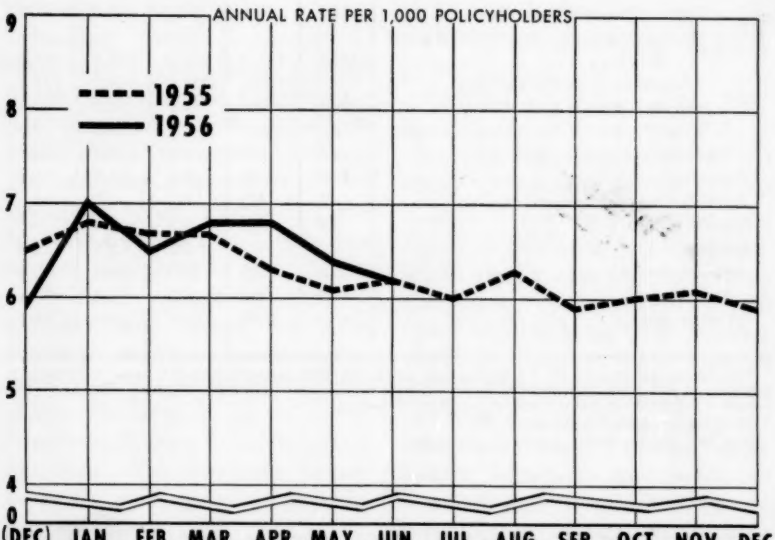
# MORTALITY FROM ALL CAUSES

## INDUSTRIAL POLICYHOLDERS - METROPOLITAN LIFE INSURANCE COMPANY




| (DEC) | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1955 | 6.8 | 6.7 | 6.7 | 6.3 | 6.1 | 6.2 | 6.0 | 6.3 | 5.9 | 6.0 | 6.1 | 5.9 |
| 1956 | 7.0 | 6.5 | 6.8 | 6.8 | 6.4 | 6.2 | | | | | | |

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